WHAT IS CLAIMED IS:

1   1.   A method for providing a redundant Fibre Channel path, comprising:

2   detecting a connection change in a Fibre Channel network; and

3   verifying a backup device has a path to a connection associated with the

4 connection change.

1   2.   The method of claim 1, wherein the detecting a connection change further

2 comprises issuing a state change notification indicating a device has been added to the

3 Fibre Channel network.

1   3.   The method of claim 1, wherein the detecting a connection change further

2 comprises issuing a state change notification indicating a device has been removed from

3 the Fibre Channel network.

1   4.   The method of claim 1, wherein the detecting a connection change further

2 comprises issuing a state change notification indicating a device has failed and severed a

3 connection to the Fibre Channel network.

1   5.   The method of claim 1, wherein the verifying further comprises querying a

2 name table by the backup device to determine whether the backup device has a redundant

3 path to the connection associated with the connection change.

1   6.   The method of claim 1 further comprising moving a World Wide Name

2   and World Wide Port Name associated with the connection change to the backup device

3   to provide a redundant path to the connection associated with the connection change.

1   7.   The method of claim 1, wherein the detecting a connection change further

2   comprises receiving an indication from a Loop Initialization Primitive indicating a device

3   has been added to the Arbitrated Loop.

1   8.   The method of claim 1, wherein the detecting a connection change further

2   comprises receiving an indication from a Loop Initialization Primitive indicating a device

3   has been removed from the Arbitrated Loop.

1   9.   The method of claim 1, wherein the detecting a connection change further

2   comprises receiving an indication from a Loop Initialization Primitive indicating a device

3   has failed and severed a connection to the Arbitrated Loop.

1   10.   The method of claim 1, wherein the verifying further comprises querying a

2   Topology Database to determine whether a backup device has a redundant path to the

3   connection associated with the connection change.

1   11.   The method of claim 1 further comprising moving an Arbitrated Loop

2   Physical Address associated with the connection change to a backup device to provide a

3   redundant path to a connection associated with the connection change.

1   12.   The method of claim 1, wherein the verifying further comprises

2   periodically verifying the backup device has a path to a connection associated with the

3   connection change.

1   13.   The method of claim 1, wherein the verifying further comprises providing

2   a warning of lack of redundancy when the backup device does not have a path to a

3   connection associated with the connection change.

1   14.   The method of claim 13, wherein the verifying further comprises taking

2   corrective action in response the warning of lack of redundancy.

1   15.   A device for providing a redundant Fibre Channel path, comprising:

2   a port coupled to a Fibre Channel network, and

3   a processor, coupled to the port, the processor configured for detecting a

4   connection change in a Fibre Channel network and verifying the port has a path to a

5   connection associated with the connection change.

1   16.   The device of claim 15, wherein the processor detects a connection change

2   in response to a state change notification indicating a device has been added to the Fibre

3   Channel network.

1   17.   The device of claim 15, wherein the processor detects a connection change

2   in response to a state change notification indicating a device has been removed from the

3   Fibre Channel network.

1   18.   The device of claim 15, wherein the processor detects a connection change

2   in response to a state change notification indicating a device has failed and severed a

3   connection to the Fibre Channel network.

1   19.   The device of claim 15, wherein the processor verifies the port has a path

2   to a connection associated with the connection change by querying a name table to

3   determine whether the port is coupled via a redundant path to the connection associated

4   with the connection change.

1   20.   The device of claim 15, wherein a World Wide Name and World Wide

2   Port Name associated with the connection change is changed to be associated with the

3   port to provide a redundant path to the connection associated with the connection change.

1   21.   The device of claim 15, wherein the processor detects a connection change

2   in response to a Loop Initialization Primitive indicating a device has been added to the

3   Arbitrated Loop.

1   22.   The device of claim 15, wherein the processor detects a connection change

2   in response to a Loop Initialization Primitive indicating a device has been removed from

3   the Arbitrated Loop.

1   23.   The device of claim 15, wherein the processor detects a connection change

2   in response to a Loop Initialization Primitive indicating a device has failed and severed a

3   connection to the Arbitrated Loop.

1   24.   The device of claim 15, wherein the processor verifies the port has a path

2   to a connection associated with the connection change by querying a Topology Database

3   to determine whether the port is coupled via a redundant path to the connection

4   associated with the connection change.

1   25.   The device of claim 15 further comprising an Arbitrated Loop Physical

2   Address associated with the connection change, wherein the Arbitrated Loop Physical

3   Address associated with the connection change is changed to be associated with the port

4   to provide a redundant path to the connection associated with the connection change.

1   26.   The device of claim 15, wherein the processor verifies the port has a path

2   to a connection associated with the connection change by periodically verifying the port

3   has a path to a connection associated with the connection change.

1   27.   The device of claim 15, wherein the processor provides a warning of lack

2   of redundancy when the port does not have a path to a connection associated with the

3   connection change.

1   28.   The device of claim 27, wherein the processor takes corrective action in

2   response the warning of lack of redundancy.

1   29.   A network providing a redundant Fibre Channel path, comprising:

2   a local node;

3   a remote node; and

4   a Fibre Channel network coupling the local node and the remote node,

5   wherein at least one of the local node, remote node and Fibre Channel network

6   includes a first physical interface and a backup physical interface, wherein the backup

7   physical interface further comprises:

8   a port coupled to a Fibre Channel network, and

9   a processor, coupled to the port, the processor configured for detecting a

10   connection change in a Fibre Channel network and verifying the backup physical

11   interface has a path to a connection associated with the connection change.

1   30.   The network of claim 29, wherein the processor detects a connection

2   change in response to a state change notification indicating a device has been added to

3   the Fibre Channel network.

1   31.   The network of claim 29, wherein the processor detects a connection

2   change in response to a state change notification indicating the first physical interface has

3   been removed from the Fibre Channel network.

1   32.   The network of claim 29, wherein the processor detects a connection

2   change in response to a state change notification indicating the first physical interface has

3   failed and severed a connection to the Fibre Channel network.

1   33.   The network of claim 29, wherein the processor verifies the backup

2   physical interface has a path to a connection associated with the connection change by

3   querying a name table to determine whether the backup physical interface is coupled via

4   a redundant path to the connection associated with the connection change.

1   34.   The network of claim 29, wherein a World Wide Name and World Wide

2   Port Name associated with the connection change is changed to be associated with the

3   backup physical interface to provide a redundant path to the connection associated with

4   the connection change.

1   35.   The network of claim 29, wherein the processor verifies the backup

2   physical interface has a path to a connection associated with the connection change by

3   periodically verifying the backup physical interface has a path to a connection associated

4   with the connection change.

1   36.   The network of claim 29, wherein the processor detects a connection

2   change in response to a Loop Initialization Primitive indicating a device has been added

3   to the Arbitrated Loop.

1   37.   The network of claim 29, wherein the processor detects a connection

2   change in response to a Loop Initialization Primitive indicating a device has been

3   removed from the Arbitrated Loop.

1   38.   The network of claim 29, wherein the processor detects a connection

2   change in response to a Loop Initialization Primitive indicating a device has failed and

3   severed a connection to the Arbitrated Loop.

1   39.   The network of claim 29, wherein the processor verifies the port has a path

2   to a connection associated with the connection change by querying a Topology Database

3   to determine whether the port is coupled via a redundant path to the connection

4   associated with the connection change.

1   40.   The network of claim 29 further comprising an Arbitrated Loop Physical

2   Address associated with the connection change, wherein the Arbitrated Loop Physical

3   Address associated with the connection change is changed to be associated with the port

4   to provide a redundant path to the connection associated with the connection change.

1   41.   The network of claim 29, wherein the processor provides a warning of

2   lack of redundancy when the backup physical interface does not have a path to a

3   connection associated with the connection change.

1   42.   The network of claim 41, wherein the processor takes corrective action in

2   response to the warning of lack of redundancy.

1   43.   A program storage device readable by a computer, the program storage

2   device tangibly embodying one or more programs of instructions executable by the

3   computer to perform a method for providing a redundant Fibre Channel path, the method

4   comprising:

5   detecting a connection change in a Fibre Channel network; and

6   verifying a backup device has a path to a connection associated with the

7   connection change.

1   44.   The program storage device of claim 43, wherein the verifying further

2   comprises querying a name table by the backup device to determine whether the backup

3   device has a redundant path to the connection associated with the connection change.

1   45.   The program storage device of claim 43 further comprising moving a

2   World Wide Name and World Wide Port Name associated with the connection change to

3   the backup device to provide a redundant path to the connection associated with the

4   connection change.

1   46.   A device for providing a redundant Fibre Channel path, comprising:

2   means for providing a port to a Fibre Channel network, and

3   means for processing coupled to the means for providing a port, the means for

4 processing detecting a connection change in a Fibre Channel network and verifying the

5 means for providing a port has a path to a connection associated with the connection

6 change.

1   47.   A network providing a redundant Fibre Channel path, comprising:

2   a local node;

3   a remote node; and

4   a Fibre Channel network coupling the local node and the remote node,

5   wherein at least one of the local node, remote node and Fibre Channel network

6   includes a first means for providing a physical interface and a second means for

7   providing a backup physical interface, wherein the second means further comprises:

8   means for providing a port to a Fibre Channel network, and

9   means for processing coupled to the means for providing a port, the means

10   for processing detecting a connection change in a Fibre Channel network and verifying

11   the backup physical interface has a path to a connection associated with the connection

12   change.